

**Report of Recommendations  
from the  
Sewer Advisory Committee  
to the  
Nantucket Board of Selectmen**

**December 13, 2006**

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## **Introduction**

The SAC respectfully offers the following policy guidelines for your consideration. The SAC identified three policy goals as follows:

Goal 1: Formulate a recommendation for Board of Selectmen review which provides a methodology and criteria for the evaluation of any modification to the sewer district boundaries.

Goal 2: Formulate recommendations on how best the Board of Selectmen may comment upon or sponsor specific Zoning Articles which would increase or decrease potential flow or density within the Sewer Districts or Needs Areas.

Goal 3: Formulate a recommendation for BOS review which provides a methodology and criteria relating to the equitable distribution of costs.

In developing the policy recommendations which follow, the Committee was guided by several principles.

Proper wastewater management is needed to protect the public health and the environment. In recognition of that the Town developed and received approval for a Comprehensive Wastewater Management Plan (CWMP). The CWMP defined the areas already sewered and established "Needs Areas" where centralized wastewater treatment is appropriate. For all other areas of the island, the general conclusion was that development under existing zoning by-laws would be appropriately supported using on-site wastewater treatment systems, as regulated by "Title V" of the Commonwealth's environmental regulations and supplemented through Town by-law. Several Needs Areas are located contiguous to the existing Sewer Districts, and these areas are referred to as Tributary Needs Areas in this report.

The Committee recognized that, although wastewater treatment should not be used to control development, availability of centralized wastewater treatment does impact the ability to develop specific real estate parcels. Therefore, it is important to understand how expansion of existing sewer districts will affect the character and development opportunities in the Needs Areas as plans to extend the wastewater system, and therefore, sewer districts, are implemented. The recommendations below for Goals 1 and 2 address both criteria for changes to sewer districts and zoning, as well as, timing of implementation of the changes.

Town Meeting has now twice adopted a policy associated with funding of the upgrade and expansion of the Surfside Wastewater Treatment Facilities which states that the Sewer Commissioners should:

*“impose such fees and charges [for construction and other charges for the Surfside Wastewater Treatment Plant] for the benefit of the Sewer Enterprise Fund to the extent permitted by law, upon those persons seeking new connections as will contribute as fully as possible towards the costs to the Town for the expanded capacity at the Facility designed for such new connections”.*

Goal 3 is intended to implement this policy and to recommend other policies which will equitably recover costs for wastewater collection and treatment.

The SAC has considered the limits existing state law impose on options for managing the Town’s wastewater system. The SAC’s recommendations below include several specific items where special legislation for Nantucket to modify state law is appropriate, specifically in Goal 3. The SAC has not had the opportunity to review how the existing Sewer Commission functions and cannot make specific recommendations for changes given its limited term and charge. However, the SAC recommends that:

The Board of Selectmen consider whether an independent Sewer Commission would improve the options for efficiently managing its wastewater system and, if so, draft special legislation for presentation to Town Meeting.

## **Section 1.**

**Goal: Formulate a recommendation for Board of Selectmen review which provides a methodology and criteria for the evaluation of any modification to the sewer district boundaries.**

Nantucket's Comprehensive Wastewater Management Plan (CWMP) divides all developed or developable property on Nantucket into one of three categories: within an existing Sewer District; in a Needs Area, as defined by the Comprehensive Wastewater Management Plan; or outside both the existing Sewer Districts and the designated Needs Areas. The CWMP determined the Needs Areas based on analysis of whether, in general, protection of the public health and environment would be better served if communities utilized by on-site wastewater treatment, under the requirements of Title V and the Nantucket By-laws, or whether it was necessary to provide centralized wastewater treatment in order to assure such protection. The Needs Areas are further divided into two categories: those which are contiguous to existing Sewer Districts and are planned for addition to an existing Sewer District (Tributary Needs Areas) and those which would more likely be served by separate centralized systems, as Sconset is now.

There are three categories of potential changes to Sewer Districts:

- A. Technical corrections to the existing Sewer Districts, that is, addition of those properties which were inadvertently left out of the Town or Sconset Sewer District when the boundaries were established. In advance of the recent Special Town Meeting, the SAC provided this recommendation to the BOS:

"The SAC recommends that a developed property that is already served by existing connections be included in the sewer district."

- B. Addition of properties within a designated Tributary Needs Area to an existing Sewer District.

This category is further divided into those requests for changes which are proposed by the Town and those which are brought forward by property owner(s) for consideration by the BOS and, ultimately, Town Meeting. Since the CWMP has designated these properties as appropriate for centralized wastewater treatment, there is no need to assess whether they should be added. The issues to be addressed include timing of the extension of the collection system and setting policy for payment of the cost of the collection system extension.

- C. Addition of properties which are outside existing Sewer Districts and are not in a designated Needs Area. For the most part, these requests would be brought to the Town by the property

owners, although it is possible that the Town might initiate such a change. The issues for this category of requests are potentially the most varied and entirely specific to the particular characteristics of the property in question.

## **Recommendations**

During the course of its deliberations the committee has discussed ways of managing the impacts of each of these changes. The Sewer Committee recommends the following actions:

### **1.1 The BOS should assess impacts on development potential which would result from including specific real estate parcels in a sewer district and recommend zoning changes prior to recommending those parcels for inclusion in a sewer district.**

Comment: The SAC was unanimous in this recommendation. The methodology for this is discussed under Section 2. This recommendation applies to additions of the Tributary Needs Areas and to any properties not currently designated for inclusion in a sewer district and which are subsequently proposed to be added to one of the existing Sewer Districts.

### **1.2 The BOS should review the capital program for timing of addition of Tributary Needs Areas to existing Sewer District(s) based on environmental and public health considerations.**

Comment: For properties in the Tributary Needs Areas, a key issue is the timing of the Town's extension of the collection system to provide the infrastructure needed for connections. The CWMP includes a general order for extension and the DPW capital plan contemplates this infrastructure. These are included with this report as Attachment "B". The BOS should be proactive in reviewing this plan to ensure that it optimizes environmental and public health considerations. With this plan, properties in the Tributary Needs Areas can be systematically recommended to Town Meeting for addition to the Sewer District, following the assessment of the need for and recommendation on zoning changes.

### **1.3 The BOS should work with owners of specific real estate parcels in the Tributary Needs Areas to recommend early addition of these parcels to a Sewer District, if requested by the owner(s), by working to develop and recommend appropriate zoning changes and facilitating owner-funded sewer extensions, which incorporate Town design and construction standards.**

Comment: In the short term, exclusion of a property in the Tributary Needs Area from the sewer district could lead to construction of additional on-site systems in the Needs Areas and/or continuing environmental and public health impacts of less than ideal (perhaps failing) on-site systems. Therefore, if a property owner in a Tributary Needs Area wants to be connected to the WWTF, the BOS should be proactive in leading a process which favors addition as soon as possible. The property owner requesting such connection should support zoning changes, if appropriate, and agree to pay applicable costs, as discussed in Section 3. There may be special considerations associated with sewer extensions which will serve multiple parties, and these must be addressed on a case-by-case basis.

**1.4 The BOS should submit a Warrant Article for the April 2007 Town Meeting amending Section 41-3 of the Code of the Town of Nantucket (Sewer Districts) which would allow the expansion of a Sewer District in a Tributary Needs Area without a Town Meeting vote. In order for an expansion to occur under this new bylaw, the sewer district expansion must receive support by majority vote of the Sewer Commission, the Planning Board, and the Finance Committee in addition to written support by both the DPW Director and Health Inspector.**

Comment: There may be circumstances where it may be desirable for a sewer district expansion to occur outside of the standard Town Meeting time frame. This recommendation would enable the Town to make such a change. The bar is set extremely high for such an expansion to occur outside of a Town Meeting vote and should only be used when statutory deadlines make a Town Meeting vote untimely. This mechanism may be used whether or not a property owner has requested addition to an existing sewer district and to correct clerical errors and omissions in the sewer districts as they are discovered.

**1.5 The BOS should use criteria such as those found on the draft check list, Attachment "A", to assess the need for a property outside any Needs Area to be added to a sewer district and support addition of those properties where centralized wastewater treatment is appropriate, following assessment and recommendation of zoning changes and based on appropriate recovery of cost of treatment capacity and sewer extensions, as discussed in Section 3.**

Comment: The SAC has developed a draft check list of criteria for that assessment, Attachment "A" to this report. It provides the Town with an objective and equitable basis to evaluate a request by a property owner to be added to a sewer district. If the scoring on the check list suggests that the property should be served by centralized wastewater treatment, capacity is available, zoning

changes are identified and supported, and owners agree to pay the costs, the BOS should recommend that the Town support the addition.

**Concluding Comment:** The SAC unanimously agreed that the impact of availability of centralized wastewater treatment on development of Madaket must be evaluated prior to creating a new sewer district, a subject which has been of concern to many in the community. While it is unlikely that the Town will plan for wastewater treatment facilities in addition to Madaket in the near term, it is possible that real estate development projects in other Needs Areas could have public health and environmental impacts from use of on-site systems, even some of the more advanced processes which are now available. There are many questions about use of such systems, such as whether new technologies will perform as needed, whether there will be diligent maintenance by private owners, and whether the Town will be able to take local sewers built to use such systems in the future. The SAC believes that these issues are important to the protection of public health and our water resources and should be discussed as part of the Town's planning and development process.



## **Section 2.**

**Goal: Formulate recommendations on how best the BOS may comment upon or sponsor specific zoning Articles which would increase or decrease potential flow or density within the Sewer Districts or Needs Areas.**

The land area of Nantucket is currently divided into four commercial zones, eight residential zones, three “limited use” residential zones and four special districts. A table of these districts is attached hereto as Attachment D. These zoning districts are subject to change by Town Meeting however and amendments to these districts are currently being considered. Within each zoning districts are differing standards such as a minimum lot sizes, frontage, setbacks, ground cover, and types of uses. Examples of other zoning standards are maximum height, requirements for special permits, and parking requirements. Currently, there are also ten overlay districts. Overlay districts have supplemental rules or standards that are applied in addition to those of the underlying or primary zoning district. The overlay districts have varying purposes, either for environmental protection, such as the Public Wellhead Recharge (PWRD) or Harbor Watershed Protection districts, or to set policy level guidance, such as the Town and Country overlay districts. The SAC found that there is general consistency between zoning districts, overlay districts and the Sewer Districts/Needs Areas of the CWMP, but that there are some anomalies and problem areas, mostly at the boundaries.

Generally speaking, high and moderate density areas are served by both public water and sewer systems. The boundaries of the Sewer District generally coincide with these areas and the zoning districts are mostly appropriate for the areas. Needs Areas generally contain moderate density areas without sewer systems that may or may not be served by public water. These lots rely on septic systems and in some cases private wells. Existing zoning districts may be inappropriate in that they allow minimum lot sizes or intensity that is dependant on the introduction of public utilities, which until recently, were thought to be unlikely. Areas outside of the Sewer Districts or Needs Areas are generally zoned and settled as low density areas compatible with on-site septic systems, although the SAC has been presented with evidence that there are some limited areas that might be more properly grouped within Sewer Districts or Needs Areas.

The SAC finds that the introduction of sewer into any area will always have some effect on the potential development of that area, in that some degree of more intensive utilization of lots is possible once the limiting factors of providing on-site wells and/or septic facilities are removed. In addition, a zoning article which either increases or decreases the allowable density allowed by zoning may have an effect on the future flow of sewage to an existing or proposed treatment facility.

The SAC also discussed how non-zoning activities, such as the purchase of land for open space purposes within sewer areas and “needs areas” or the introduction of a 40-B affordable housing development may either remove or add to projected flows as estimated by the CWMP. The SAC stresses that zoning changes may be advisable for reasons unrelated to sewer issues such as preservation of neighborhood character, where density might be reduced, or to provide for housing opportunities, where density might be increased, as appropriate to the situation.

The SAC discussed a variety of zoning techniques that have or could be used to both address neighborhood concerns about impacts of the introduction of sewers to a neighborhood, such as Madaket, certain Needs Areas of the Surfside WWTF, and existing neighborhoods. These include:

- Altering zoning districts, which change minimum lot sizes, setbacks, groundcover and uses.
- Altering factors such as height, uses or other factor within existing districts.
- Introducing additional requirements depending on location within an overlay district such as “Town” or “Country” or Public Wellhead Recharge, as examples.

The SAC also discussed effective non-zoning techniques that are also available to the Town including:

- Creation of deed restrictions enforceable by the Town. The SAC reviewed the fact that private deed restrictions may be unenforceable after 30 years (MGL 184 § 23) whereas Town enforced provisions are not subject to this limitation.
- Acquisition of easements or development rights.
- Acceptance of conservation restrictions.

There was agreement by the SAC that the availability of sewerage should not be used as a growth control mechanism and that there are reasons to extend the sewer system, as articulated by the CWMP, related to public health and environmental protection, but that caution should be exercised when adding unanticipated flows which would have the effect of overwhelming or drastically reducing the designed lifespan of existing or proposed facilities.

The SAC notes that the 41-81D Master Plan process has and should continue to examine zoning changes. Part of this process has been to engage neighborhoods in a dialogue about issues such as “neighborhood character”, appropriate density, and the advisability of extending utilities.

## **Recommendations**

### **2.1 Establish a simple baseline for managing sewer districts based on dwelling units or other applicable measurement.**

Comment: The start date of the baseline would be July, 2004, the date of approval of the CWMP. All zoning, open space purchases or other land-use related actions within Sewer Districts or Needs Areas that either increase or decrease the original Earth Tech estimates should be tabulated based on a dwelling unit count unless a different approach is adopted. A table of capacity reductions/expansions by dwelling units to date is attached at the end of this document as Attachment "C".

The SAC recognizes that over time the baseline may need to be recalibrated and suggests that it be periodically reviewed for consistency with design projections.

### **2.2 Provide information on the effect of any proposed zoning articles to Town Meeting in accordance with an updated baseline.**

Comment: Zoning articles which affect wastewater flows within the current Sewer District boundaries and Needs Areas should be fully analyzed so that their impacts can be properly communicated and easily understood by voters. Flow counts as calculated by Earthtech in the CWMP based upon the dwelling unit count in order to preserve the 20 year design life of the expanded Surfside WWTF should not be exceeded.

### **2.3 Coordinate with the Planning Board and provide specific suggestions and direction about future wastewater service as part of the Chapter 41-81D Master Plan.**

Comment: Several of the nine elements of the 41-81D Master Plan are directly relevant to issues regarding wastewater management. Element 7 is "Services and facilities which identifies and analyzes existing and forecasted needs for facilities and services used by the public." Element nine, "Implementation ... defines and schedules the specific municipal actions necessary to achieve the objectives of each element." Other elements certainly have a direct or indirect relationship. These comments should be consistent with the CWMP.

### **2.4 The development of area plans or other equivalent public outreach will ensure that terms such as neighborhood character are properly addressed in an appropriate**

**forum when considering zoning or other changes prior to additions to the sewer districts.**

Comment: Since area plans are following the same outline as the Master Plan, the issues of services and facilities will be discussed at the localized level of the neighborhoods when considering zoning or other changes to sewer districts.

**2.5 Zoning changes to properties in Sewer Districts must be evaluated in accordance with the CWMP:**

Comment: During the public review of proposed warrant articles, the BOS should require proponents to demonstrate consistency with specific references to the CWMP.

**2.6 Zoning changes in Tributary Needs Areas must be completed in advance of or in concert with sewer infrastructure extensions:**

Comment: All three Tributary Needs Areas of the Surfside WWTF lack comprehensive infrastructure although a significant portion of Monomoy is serviced by both sewer and water and water has recently been extended to the Somerset-3M Area. All of these areas should be analyzed for post-sewer impacts and zoning recommendations developed in advance of service.

**2.7 Zoning modifications in other Needs Areas identified for future facilities, primarily Madaket, but including Polpis, Pocomo, Quidnet, and Wauwinet should be prioritized.**

Comment: The SAC recommends that zoning changes be examined for three of the Needs Areas identified for future facilities, Madaket, Quidnet and Wauwinet. These three areas are examples of how the addition of infrastructure may impact current density that has not been heretofore realized due to constraints of existing site conditions and lack of municipal services. Madaket and Quidnet are both zoned Residential-2 (R-2), allowing 20,000 square foot minimum lots, and Wauwinet is zoned Residential-1 (R-1), allowing 5,000 square foot minimum lots.

Polpis and Pocomo are in the lowest density zone LUG-3, requiring 120,000 square foot (2.75 acre) lots.

An analysis of appropriate zoning and non-zoning techniques in Madaket in concert with the area plan workgroup should be the first priority.

**2.8 The area west of the existing sewer district in Sconset, largely located in Sconset Residential-2 should be referred to the Sconset Area Plan workgroup for a recommendation to the Town.**

Comment: The definition of the Sconset Service Area in the CWMP requires further study.

**2.9 Any application for sewer district extension into areas not included within the limits of districts and needs areas should be postponed if zoning concerns are triggered on the criteria checklist (see Attachment “A”).**

Comment: In areas other than those already identified as being in a sewer district, zoning analysis is especially critical and any proposal which the Selectmen determine might lead to unintended consequences of adding unanticipated flow to current or planned sewer facilities should be strictly regulated.

**2.10 Appropriate zoning changes and/or Town enforceable restrictions on future growth should be agreed to/negotiated in advance of any action on these articles.**

Comment: In areas other than those already identified as being in a sewer district, zoning analysis is especially critical and any proposal which the Selectmen determine might lead to unintended consequences of adding unanticipated flow to current or planned sewer facilities should be strictly regulated.

### **Section 3.**

**Goal: Formulate a recommendation for BOS review which provides a methodology and criteria relating to the equitable distribution of costs.**

The current method is as follows:

- A. The capital cost of Sconset is built into the annual sewer fees assigned to all properties connected to both the Sconset and Town sewer districts. There is no taxpayer contribution to these costs.
- B. Two recent Town Meetings have voted that the capital cost of the Surfside plant is to be paid 34% by the real-estate taxpayers, and the remaining to be paid by the Sewer Enterprise Fund which includes those connected to the Sconset and Surfside plants, and, further, the cost to be paid by the Sewer Fund for the expansion is to be assigned to new connections to the greatest extent possible.
- C. The operating and maintenance (O/M) expenses for both sewer districts, including the cost of repairing the collection system and Infiltration/Inflow are paid by the Sewer Fund as part of the annual sewer-user fee.
- D. A privilege fee has been established which will charge each new connection a fee of \$6,600. This number will change based on the actual final capital cost. The fee is to be collected upon issuance of a sewer permit. The property owner will have the option to pay the fee, with interest, over a 20-year period.

### **Recommendations**

During the course of its deliberations the committee has discussed various changes to the current funding methods outlined above. The SAC recommends the following actions:

#### **3.1 Submit a Home Rule Petition giving the Town more options for managing its wastewater system.**

Comment: The Home Rule Petition should contain provisions that are as broadly based as possible (including for example the charging of fees for late or unpaid bills) in order to identify

revenue and funding options to help pay for O&M costs, capital costs, and improve overall management.

### **3.2 Maintain the Sconset and Town sewer districts as they are now structured.**

Comment: The SAC finds that the method adopted by Town Meeting to pay for the capital cost of the expansion and upgrade of the Surfside WWTF is reasonable. While the Committee is aware of the possibilities of separating the Sconset and Town sewer districts and potentially reallocating capital and operating costs, it does not recommend such a change.

### **3.3 Include interest costs for the expansion of the Surfside WWTF as a component in calculating the Privilege Fee/Capacity Utilization Fee.**

Comment: This will require Special Legislation. Other communities in the Commonwealth have adopted this provision.

### **3.4 Base the calculation of the Privilege Fee upon the anticipated usage for each new connection.**

Comment: The SAC recommends that the Privilege Fee for new residential connections be calculated by the number of bedrooms per dwelling. The SAC also recommends that the Town impose a Privilege Fee on the expansion of existing residential dwellings with connections based on the number of bedrooms added. This differs from the current Privilege Fee that is charged equally to each connection. New accessory residential structures which are connected should also be assessed a Privilege Fee equal to no less than one bedroom. The SAC also recommends that the Privilege Fee for commercial, industrial, institutional, or other non-residential properties be calculated according to established formulae based on projected flow rates.

### **3.5 Assess any properties added to a Sewer District from outside a Needs Area a premium in addition to the Privilege Fee, called a Capacity Utilization Fee. This fee should be deposited into a Wastewater Capital Improvement Fund to fund future expansion of the Surfside WWTF.**

Comment: The SAC recommends adding a premium to the Privilege Fee for properties which are outside the Tributary Needs Areas because these properties were not included in the WWTF

planning based on the CWMP. This premium would be deposited into a sinking fund to support future expansion of the WWTF.

**3.6 Charge betterments, special assessments, or any other legal charges to the properties being served by collection system extensions, to pay for all costs for sewer-line extensions to serve new connections, both within the current sewer districts, and in any areas added to the current sewer districts.**

Comment: With the adoption of such a policy for line extensions, Needs Areas could be added to the Sewer District immediately without additional costs to current sewer users or taxpayers.

**3.7 Grant authority to the Town to require properties in the sewer district to connect to the sewer system.**

Comment: Because the privilege fees are not payable until a property is connected, it will become increasingly important, for both environmental and financial reasons, to require properties to connect. While it is expected that the benefits of a sewer connection will encourage early market-driven line extensions, thus facilitating the collection of privilege fees, the rate of hook-ups will directly affect the debt-service burden on the Sewer Enterprise Fund.

**3.8 Require that the Town report quarterly on the number of connections and additions, and changes in projected capacity due to zoning changes or other factors.**

Comment: Since the funds collected in the form of privilege fees directly affect the sewer-user charge, it will be necessary to keep the community informed about the costs and progress in achieving the benefits of extending sewer lines. In addition, tracking capacity status will provide a useful guide to the rate-of-capacity drawdown over time.

**3.9 The extent of Infiltration/Inflow allocation, if any, should be determined by the Sewer Commissioners after careful study. Authority may be sought through special legislation for the Town to include some costs related to Infiltration/Inflow mitigation in the current collection system to the privilege fee.**

Comment: In its discussion of the possibility of including Infiltration/Inflow, the Committee considered that the capacity of the new Surfside facility would have had to be 1,000,000 gallons larger if a similar amount of Infiltration/Inflow had not been planned to be removed from the collection system. This point of view sees this cost as primarily a substitute for a larger plant.



Another point of view is that imposing Infiltration/Inflow costs on new connections is not good public policy for several reasons. Removing Infiltration/Inflow does not create new capacity. Excessive inflow and infiltration into the sewer collection system is almost always a result of past neglect of maintenance in the collection system. Maintenance of the existing system is the responsibility of all sewer users. While increasing the privilege fee by adding Infiltration/Inflow costs may seem like a good way to shift costs away from existing sewer users, it might discourage some from connecting to the system, with the consequence of leaving on-site systems in use and potentially adding more, impacting public health and the environment. Mandating hook-ups, which may be good public policy and ensure the connections, will be more difficult the higher privilege fee.

A majority—but not all members—of the Committee favors adding the authority to the Sewer Commission through special legislation to assess a portion of Infiltration/Inflow to the privilege fee.

**Concluding Comment:** While the recommendations above should assist the BOS to facilitate the financing of sewer expansion to needs or service areas that are tributary to Surfside and Sconset, they do not address who should pay for the next WWTF. The CWMP has developed a proposed plan to phase construction of future expansion. How or when to upgrade wastewater treatment in Madaket may well be the next decision. The community will face similar questions as other future “needs areas” will serve fewer and fewer lots. At what point does this get closer to requiring all the local users from the non-Tributary Needs Areas to pay for “their” wastewater treatment, as do individuals on a septic system? The Committee believes that this situation is far enough in the future to leave a recommendation to a future date.

#### **Section 4.**

##### **Supplemental Recommendations**

The SAC, through its deliberations, has uncovered other issues with respect to sewer policy that the Board may wish to consider to improve the administrative governance of sewer policy, capture costs, and increase local control. The Town should consider introducing special legislation for the April, 2007 Annual Town Meeting containing the following provisions:

- 4.1 The SAC has considered the limits existing state law imposes on options for efficiently managing the Town's wastewater system. The SAC's recommendations below include several specific items where special legislation to modify state law is appropriate, specifically in Goal #3. The SAC has not had the opportunity to review how the existing Sewer Commission functions and cannot make specific recommendations for changes given its limited term and charge. However the SAC can recommend that the Board of Selectmen consider whether an independent Sewer Commission would improve options for efficiently managing its wastewater system.**
- 4.2 Authorize the Town to operate and maintain sewers;**
- 4.3 Authorize the Town to adopt bylaws establishing sewer districts through its Town Meeting or through administrative procedures;**
- 4.4 Authorize the Town to capture interest costs as well as capital costs in privilege fee calculation;**
- 4.5 Authorize the Town to capture Infiltration/Inflow and rehabilitation costs in privilege fee calculation;**
- 4.6 Authorize the Town to prescribe its own rules and regulations subject to Town Meeting approval;**
- 4.7 Authorize the Town to assess charges for late or unpaid bills;**
- 4.8 Authorize the Town to require connections to sewer system pursuant to the rules and regulations adopted at Town Meeting; and**
- 4.9 Authorize the Town to be excused from certain provisions of MGL 30B.**

The SAC discussed several other supplemental items. The issue of checkerboarding was tabled, and the items below were voted not to include as recommendations:

To authorize the Town to use public ways/private ways/State property/ and eminent domain of private property to lay out and maintain sewers.

Add revolving account capability to the Sewer Enterprise Fund.

Authorize the Town to establish flow limits per connection

Authorize the Town to limit unregulated sewers.

## Glossary of Terms

**Beaches:**

A type of soil which is poorly suited for septic tank absorption fields. This type of soil is located in long narrow areas which generally does not support vegetation.

**Berryland:**

A type of soil which is poorly suited for septic tank absorption fields. This type of soil is located in outwash plains and coastal plains consisting of very poorly drained soils with a firm ash-like layer of soil.

**Betterment Assessment:**

As defined in the Town Code, a person who enters his/her particular drain onto a main drain, common sewer and sewage treatment facilities or who by more remote means receives benefit thereby for draining his/her land or buildings, shall pay to the Town a proportional part the charge of making or repairing the same. Such assessments shall be made by a rate based upon the Uniform Unit Method. This method shall be based upon the sewerage construction cost divided among the total number of existing and potential sewer units to be served. Each sewer unit shall be equal to a single-family residence. Potential sewer units shall be calculated on the basis of zoning then in effect. Existing and potential multifamily, commercial, industrial and semipublic uses shall be converted into sewer units on the basis of residential equivalents.

**Capacity:**

The design flow that a wastewater system and its components can handle in a specific period of time with predictable and consistent performance.

**Collection System:**

Sewers, pipes, pump stations and other structures which convey liquid waste for treatment.

**Comprehensive Wastewater Management Plan (CWMP):**

A 20-year planning document mandated by Mass. regulation, created by Earth Tech Inc., which identifies areas of Nantucket where sub-surface wastewater disposal problems exist.

**Connection Fee:**

The fee charged by the Town to recoup all incurred cost incidental to the physical connection of residential, commercial, and industrial property to a common sewer.

**Country Overlay District:**

This area outside of the Town Overlay District is characterized by traditional and historical rural land use patterns. Development in this area is costly to build and maintain because it is outside of the Town infrastructure and creates automobile dependency.

**Existing User:**

A property which was already connected to the wastewater system prior to April 28, 2005. These properties will not be charged a "New User" privilege fee.

**Harbor Watershed Protection District:**

An administrative district established by the Department of Environmental Protections, Administrative Consent Order with Penalties (ACOP) which purpose is to provide 120 locally issued sewer connection permits within the confines of the district boundaries exclusive of the Sewer Bank also established by the ACOP.

**Inflow and Infiltration (I/I):**

Inflow occurs when excess water runs through roof drains connected to sewers and broken or badly

connected sewer service lines. Infiltration occurs when too much rainfall or melted snow enters through the ground into leaky sewer pipes.

**Needs Areas:**

Areas, as identified by the Comprehensive Wastewater Management Plan(CWMP), where centralized wastewater treatment is appropriate.

**New User:**

Any property which connects to the Surfside Wastewater Treatment Facility after April 28, 2005 will be considered a "New User" and will be charged a "New User" privilege fee.

**On-Site Wastewater Disposal System:**

A privately owned system designed to treat and dispose of domestic sewage. A typical On-Site Wastewater Disposal System consists of a tank that receives waste from a residence or business and a system of tile lines or a pit for disposal of the liquid effluent (sludge) that remains after decomposition of the solids by bacteria in the tank, and must be pumped out periodically.

**Operations and Maintenance (O&M):**

Actions taken after construction to ensure that facilities constructed to treat waste water will be properly operated and maintained to achieve normative efficiency levels and prescribed effluent limitations in an optimum manner.

**Pawcatuck:**

A type of soil which is poorly suited for septic tank absorption fields. This type of soil is located in broad, nearly level areas consisting of mucky peat underlain by coarse sand and is limited by tidal inundation.

**Privilege Fees:**

A sewer privilege charge shall be assessed for the permanent privilege of entering main drains, sewers or sewage treatment facilities where such fees shall apply to that portion of cost associated with providing capacity sufficient to meet the needs of previously unsewered properties.

**Public Wellhead Recharge District:**

An area designated as sensitive, to ensure a safe and healthy public water supply which preserves the quality and quantity of the Town's groundwater.

**Septic System:**

A privately owned on-site system designed to treat and dispose of domestic sewage. A typical septic system consists of a tank that receives waste from a residence or business and a system of tile lines or a pit for disposal of the liquid effluent (sludge) that remains after decomposition of the solids by bacteria in the tank, and must be pumped out periodically.

**Sewerage:**

The entire system of sewage collection, treatment, and disposal.

**Sewer District:**

An area shown on a map which is determined to have developed or developable properties which are, or may be, connected to a sewer system.

**Sewer Enterprise Fund:**

A financial mechanism established by Town Meeting vote to raise funds through the application of user fees, independent of general fund taxation, with the expressed purpose of offsetting all operation and maintenance cost pertaining to sewers, wastewater treatment facilities and associated appurtenances.

**Sewer Extension:**

Infrastructure which supports the addition of sewer connections.

**Title V:**

The Commonwealth's Environmental regulations for on-site wastewater treatment systems requiring inspections of septic systems and cesspools before properties are sold, or the house is expanded, or the use of the house is changed (example: from residential to commercial use). Regulated by the Massachusetts Department of Environmental Protection and the local Board of Health.

**Town Overlay District:**

This district limits spatial growth by following traditional settlement patterns of Nantucket Town and encourages development where infrastructure already exists.

**Tributary Needs Areas:**

Specific needs areas, as identified by the Comprehensive Wastewater Management Plan(CWMP), which are planned for addition to the Surfside WWTF as their location is contiguous to an existing Sewer District.

**Udipsamments:**

A type of soil which is poorly suited for septic tank absorption fields. This type of excessively drained sandy soil is located near coastal beaches.

**User Fee:**

A charge for services delivered to those property owners whose property is connected to the municipal sewer collection system. The sewer user fee rate is adjusted, as may be necessary, by the Sewer Commissioners to cover 100 % of the cost of operation and maintenance of the sewer system, treatment facilities and other associated appurtenances.

**Wastewater Capital Improvement Fund:**

An independent fund of the Town established with the expressed purpose of establishing a financial account to offset future capital expense. Funding for this account may derive from sewer user fees, privilege fees, general fund contributions or any other such source legally voted by the Town.

**Wastewater Treatment Facility (WWTF):**

A facility where, through chemical and biological processes, organic matter, bacteria and solids are removed from residential, commercial and industrial wastewaters.

**Water Quality:**

The determination of the level of pollutants in water.

Attachment "A"**Criteria Checklist for Proposed Expansion of the Sewer District**

Name of person proposing the addition of properties\_\_\_\_\_

As: ☐ An individual ☐ On behalf of multiple property owners (please attach authorization)

☐ On behalf of an organization or association (please attach vote, bylaws authorizing, etc.)

☐ As a government body (attach vote,etc,)

Applicants must receive the two points of section 1 and some number of additional points to be recommended for inclusion into either a Sewer District or Needs Area. Check all boxes below marking any that are not applicable with "N/A". Incomplete forms will be returned.

All properties approved for inclusion shall pay a privilege fee and, where appropriate, a betterment assessment covering all costs associated with sewer construction, including engineering, legal, administrative and financing charges. Properties must connect to the sewer within 2 years of approval.

**Evaluation Criteria**\_\_\_\_\_

**Required:****1. Capacity:**

Adequate capacity in sewerage system must be available for proposed additional flow.  
(maximum of two points)

- Infrastructure is available to meet added demand as certified by the Sewer Commissioners/DPW ☐ (+1)
- If within Surfside WWTF, capacity has been accounted for in Removal/Addition Baseline as certified by the Sewer Commissioners/DPW ☐ (+1)
- Infrastructure is not available to meet demand or baseline units not available-  
**DISQUALIFIED**  
*Please consult with Sewer Commissioners/DPW to discuss remedial action.*

**Elective (Partial list of Electives):****2. Failed Septic system:**

Property must already be developed and have evidence of no feasible replacement. Property owner must demonstrate hardship related to conditions below (maximum of three points):

- Soil Type: Udipsammments-Beaches-Pawtucket, Berryland ☐ (+1)
- Groundwater: Between 0-5 feet below surface ☐ (+1)

- Wetlands: Wetlands within 100 feet of property \_\_(+1)

### 3. Land Use:

Properties must be evaluated in accordance with the following zoning and land use criteria (maximum of six points):

- Lot size: Less than 40,000 square feet\_\_ (+1)
- Zoning: Lot is less than or meets minimum lot size requirement. \_\_(+1)  
 Lot is greater than twice the minimum lot size. \_\_ (-1)  
 Deed restriction or other instrument offered by property owner limiting development of lot to intensity equal to or below pre-sewer condition. \_\_ (+1) (please attach)
- Overlay Districts:  
 Town \_\_ (+1)  
 Public Wellhead Recharge \_\_ (+1)  
 Harbor\_\_(+1)

### 4. Special Condition: (one point maximum)

- Proximity to Public wellhead less than 500 feet \_\_ (+1)

\_\_\_\_\_  
 Signature of owner/authorized representative

\_\_\_\_\_  
 Date

.....  
 (do not write below this line-official use only)

Date Received\_\_\_\_\_

Complete\_\_ Incomplete\_\_ returned \_\_\_\_\_.  
 (date)

Forwarded on \_\_\_\_\_.  
 (date)

\_\_\_\_\_  
 Sewer Commission Clerk

1. Capacity: Total Points\_\_\_\_\_ of\_\_

\_\_\_\_\_  
 Approved: DPW

\_\_\_\_\_  
 Date

2. Failed Septic: Total Points\_\_\_\_\_ of \_\_

\_\_\_\_\_  
 Approved: Board of Health

\_\_\_\_\_  
 Date



3. Land Use: Total Points\_\_\_\_\_of \_\_\_\_

\_\_\_\_\_  
Approved: Planning Office

\_\_\_\_\_  
Date

4. Special: Total Point\_\_\_\_\_ of \_\_\_\_

\_\_\_\_\_  
Approved: Wannacomet Water  
Company

\_\_\_\_\_  
Date

TOTAL: \_\_\_\_\_ Points of 12 possible.

I recommend/do not recommend inclusion of the properties.

\_\_\_\_\_  
Chairman: Sewer Commissioners

\_\_\_\_\_  
Date

Attachment "B"

**CWMP 10 YEAR  
CAPITAL IMPROVEMENT**

**OFF-SITE SOLUTIONS**

<b><u>Project</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>
1. Madaket WWTF Design	2008	\$3,590,000
2. Madaket WWTP Construction	2010	\$43,310,000
3. Madaket Collection System Design	2009	\$1,490,000
4. Madaket Collection System Const.	2011	\$18,000,000
5. Warren's Landing Collection System Des.	2009	\$250,000
6. Warren's Landing Collection System Const.	2010	\$2,980,000
7. Somerset Collection System Design	2012	\$1,180,000
8. Somerset Collection System Const.	2013	\$14,300,000
9. Monomoy Collection System Design	2014	\$1,050,000
10. Monomoy Collection System Const.	2015	\$12,640,000
11. Shimmo Collection System Design	2016	<u>\$16,630,000</u>
<b>TOTAL FOR OFF-SITE SOLUTIONS =</b>		<b>\$115,420,000</b>

**Infiltration/Inflow REDUCTION & COLLECTION SYSTEM IMPROVEMENTS**

<b><u>Project</u></b>	<b><u>Design Year</u></b>	<b><u>Construction Year</u></b>	<b><u>Combined Cost Design &amp; Const.</u></b>
1. Area N-1		2007	\$8,560,000
2. Area N-2	2007	2008	\$12,140,000
3. Area N-3A	2008	2009	\$12,520,000
4. Area M-2 North	2010	2011	\$8,599,686
5. Area M-2 South	2011	2012	\$6,230,000

<b><u>Project</u></b>	<b><u>Design</u> <u>Year</u></b>	<b><u>Construction</u> <u>Year</u></b>	<b><u>Combined Cost</u> <u>Design &amp; Const</u></b>
6. Area N-4	2012	2013	\$10,149,949
7. Area L-1 South	2013	2014	\$7,431,022
8. Area N-4A	2014	2015	\$15,854,442
9. Area L-2	2015	2016	\$2,168,111
10. Area L-1 North	2016	2017	\$3,900,000
11. Area L-3	2017	2018	<u>\$1,630,000</u>
<b>TOTAL FOR I/I &amp; COLLECTION SYSTEM IMPROVEMENTS =</b>			<b>\$89,183,210</b>

<b>Off-site Solutions =</b>	<b>\$115,420,000</b>
<b>I/I Reduction &amp; Collection System Improvements =</b>	<b>+ <u>\$89,183,210</u></b>

<b>ESTIMATED GRAND TOTAL COST OF 10 YR. WASTEWATER CAPITAL IMPROVEMENTS =</b>	<b>\$204,603,210</b>
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Attachment "C"Removals/Additions to Baseline Surfside WWTF  
as of 11/15/06

<i>Rezoning of Pine Valley</i>	<i>-240 potential units</i>
<i>Removal of area along South</i>	
<i>Shore Road from sewer district</i>	<i>- 60 potential units</i>
<i>Acquisition of Holdgate property</i>	<i>-120 potential units</i>
<i>Acquisition of Ottison property</i>	<i>- 9 potential units</i>

*Note: Other actions include restrictions on secondary dwellings imposed by Planning Board, other zoning changes.*

*And actions which added units such as:*

<i>Rugged Scott 40B</i>	<i>+32 unanticipated units</i>
	<i>(40 permitted-8 allowed)*</i>
<i>Abrams Quarry 40B</i>	<i>+28 unanticipated units**</i>
Residential Commercial Downtown	+50
Hooper Farm/First Way	+30

*Note: Other actions include relaxing development standards, allowing additional dwelling units, or reducing factors such as lot size or frontage requirements.*

*\*net new units because area is within needs area boundary*

*\*\*total new units counted because area is outside needs area boundary*